

ABSTRACT OF THE INVENTION

**METHODS OF IDENTIFYING LUNG HOMING MOLECULES
USING MEMBRANE DIPEPTIDASE**

The present invention provides a method of
5 identifying a membrane dipeptidase (MDP)-binding
homing molecule that selectively homes to lung
endothelium. The method includes the steps of
contacting MDP with one or more molecules; and
determining specific binding of a molecule to the
10 MDP, where the presence of specific binding
identifies the molecule as a MDP-binding homing
molecule that selectively homes to lung endothelium.
Such MDP-binding homing molecules can be linked to a
moiety and, when administered to a subject as a
15 conjugate, can selectively direct the moiety to lung
endothelium in the subject.